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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/579,258

05/11/2006

Wolf-Dieter Wichmann

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FLYNN THIEL BOUTELL & TANIS, P.C.  
2026 RAMBLING ROAD  
KALAMAZOO, MI 49008-1631

EXAMINER

MCGRAW, TREVOR EDWIN

ART UNIT

PAPER NUMBER

3752

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/579,258	<b>Applicant(s)</b> WICHMANN, WOLF-DIETER	
	<b>Examiner</b> Trevor E. McGraw	<b>Art Unit</b> 3752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 September 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 2-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2-6 is/are allowed.
- 6) ☒ Claim(s) 7-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Examiner's Comment***

Examiner acknowledges the cancellation of Claim 1.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chaplinsky (US 5,135,174) in view of Knight (US 3,716,191).

In regard to Claims 7-11, Chaplinsky teaches a sprayer for spraying agricultural liquids (apparatus system shown in Figure 1) with a carrier liquid tank (1), a carrier liquid pump (5), several spraying nozzles (21, 22, 23) and associated nozzle holders (22", "23" and "24" are held in "P") for connecting the spraying nozzles to a carrier liquid line (9,13), at least one active ingredient tank (2,3,4) and several metering pumps (6,7,8) for delivering active ingredients connectable to the active ingredient tank (2,3,4) characterized in that with each nozzle (22,23,24) holder ("22", "23" and "24" are held in

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“P”) is associated with at least one metering pump (6,7,8) which is in flow connection with the nozzle holder (22”, “23” and “24” are held in “P”).

Chaplinsky also teaches where a control unit (32,33,34) is provided to calculate the active ingredient quantity to be metered in control pulses, the metering pumps (5,6,7,8) have a clearly defined delivery for each working stroke and can be driven to corresponding control pulses. The control unit (32,33,34) also has a number of control pulses as a function of a predetermined set value for an active substance concentration and a carrier liquid quantity instantaneously delivered by the carrier liquid pump (see column 3, line 31 thru column 4, line 21) and the metering pumps 6,7,8) can be driven in hydraulic pulses (pulses of content from tanks “2”, “3” and “4”).

Chaplinsky further teaches where the nozzle holders and the metering pumps are connected in series to the active ingredient line and are arranged in several partial widths and the partial widths are associated with active ingredient supply line and the sprayer has a mixing chamber and at least one metering pump.

Chaplinsky substantially teaches the present invention with the exception of the active ingredient supply line being provided with a compressed air connection so that during return operation active ingredient can be forced back into the active ingredient tank.

However, Knight teaches that it is known to have an active supply line being provided with a compressed air connection so that during a return operation, an active ingredient or substance (liquid paint in the case of Knight) can be forced back into the active ingredient tank with the aid of compressed air. It would have been obvious to

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one having ordinary skill in the art at the time the present invention was made to provide the active ingredient line of the spraying system taught by Chaplinsky with the compressed air line of Knight in order to provide a manner in which fluid can be conserved and accurate spraying can occur.

The combination of Chaplinsky in view of Knight would permit the compressed air connection to be provided downstream of the final metering pump in the active ingredient supply direction and the partial width of the active ingredient supply line with one compressed air connection (limitations of claims 8 and 9).

### ***Allowable Subject Matter***

Claims 2-6 are tentatively allowed over the prior art of record.

### ***Response to Arguments***

#### **Objection to Drawings**

Applicant's arguments, see page 6, filed 09/18/2008, with respect to the objection to the drawings have been fully considered and are persuasive. The objection to the drawings has been withdrawn in view of Applicant's amendment to paragraph 53 of the specification that designates reference number "26" to be hydraulic connection.

#### **Objection to Specification**

Applicant's arguments, see page 6, filed 09/18/2008, with respect to the objection to the specification have been fully considered and are persuasive. The objection to the specification has been withdrawn in view of Applicant's amendment to line 2 of page 4 that changes "metered in in" to "metered in" and corrects the typographical error.

#### **Claim Objections**

Applicant's arguments, see page 6, filed 09/18/2008, with respect to the objection to Claim 4 have been fully considered and are persuasive. The objection to Claim 4 has been withdrawn in view of the amendment to Claim 4 that changes "metered in in" to "metered in" so that Claim 4 is in proper grammatical form.

#### **Rejection under 35 USC § 112**

Applicant's arguments, see page 6 and amendments to the Claims, filed 09/18/2008, with respect to the generally narrative nature of the claims have been fully considered and are persuasive. Although Applicant amends the claims in a minimal manner, the rejection of the claims has been withdrawn in view of Applicant's amendments as they are now somewhat comprehensive.

#### **Rejection under 35 USC § 102**

Applicant's arguments, see amendments to Claim 2, filed 09/18/2008, with respect to the rejection of Claim 2-6 have been fully considered and are persuasive. The rejection of Claims 2-6 has been withdrawn in view of Applicant's amendment that

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incorporates the previously indicated allowable subject matter with limitations of formerly preceding claims.

**Rejection under 35 USC § 103**

Applicant's arguments filed 09/18/2008 have been fully considered but they are not persuasive. Examiner cannot agree with Applicant's assertion that the combination of Chaplinsky in view of Knight does not teach the limitations of Claims 7-11. Examiner hereby maintains the rejection of Claims 7-11 as Applicant's nominal amendments to Claim 7 are not enough to overcome the applied combined prior art of record.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trevor McGraw whose telephone number is (571) 272-7375. The examiner can normally be reached on Monday-Friday (2nd & 4th Friday Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Len Tran can be reached on (571) 272-1184. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/T. E. M./  
Examiner, Art Unit 3752

/Len Tran/  
Supervisory Patent Examiner, Art Unit 3752